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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/763,807	06/15/2001	Michael Vincent Lewis	021238-437	3685

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BURNS DOANE SWECKER & MATHIS L L P
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EXAMINER

JARRETT, RYAN A

ART UNIT PAPER NUMBER

2125

DATE MAILED: 02/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/763,807

Applicant(s)

LEWIS ET AL.

Examiner

Ryan A. Jarrett

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2001 and 15 June 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7. 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 31 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 31 recites, "the motion controller is connected to the field bus." The specification says that the motion controller is not connected to the field bus (pg. 38 lines 14-16).

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 7-10, 17, 22, and 30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Referring to claims 7, 9, 10, and 30, it is unclear what is meant by the term "virtual axis". This limitation has not been evaluated on its merits.

Referring to claim 8, it is unclear what is meant by "capstan motor" and where the reference to this term is in the disclosure. This limitation has not been evaluated on its merits.

Referring to claim 17, it is unclear what is meant by "field device".

Referring to claim 22, the term "similar device" is vague and indefinite.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-6, 8-29, 31, 34-36, 43-45, 47, and 48 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Arthur et al. U.S. Patent No. 4,463,766. Referring to claims 1, 19, 35, 47, and 48, Arthur et al. discloses a cigarette manufacturing apparatus and method comprising: a tobacco rod maker for making double length tobacco rods (col. 1 lines 48-50); a tipper for applying filters to tobacco rods to form filter tipped cigarettes (col. 3 lines 16-24); a transfer apparatus for transferring double length tobacco rods from the rod maker to the tipper (col. 3 lines 16-24); wherein each of the tipper and the rod maker comprises a plurality of devices for monitoring and a plurality of devices for affecting parameters of the rod maker, the tipper or the cigarettes being manufactured, and wherein one or more of said monitoring devices and said parameter affecting devices both monitors and affects parameters (col. 7 lines 13-68); a controller for controlling the plurality of devices on the tipper and the rod maker, including varying one or more parameters of the rod maker, the tipper or the cigarettes being manufactured, in response to conditions monitored by one or more of said devices (Fig. 1 reference number 23, col. 7 lines 13-68); a field bus, the plurality of devices and the controller each being connected to the field bus (Fig. 1 reference

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number 23); a second controller (HMI) for providing tipper, rod maker and cigarette information to an operator and for communicating input data from the user to one or both of the first and second controller (implicit in the term "console" used by Arthur et al. used in col. 3 lines 52-59); a plurality of synchronized motors each for driving a respective operation in the tipper or rod maker (col. 1 line 57 – col. 2 line 12); and a motion control device for controlling the plurality of synchronized motors (col. 1 line 57 – col. 2 line 12).

Referring to claims 2-4, 11-18, 20-28, 31, 36, Arthur et al. discloses that the motion controller is connected to the controller and the field bus; comprising at least one human-machine interface (HMI) connected to the field bus; wherein the at least one HMI comprises a rod maker HMI and a tipper HMI, each of the rod maker HMI and the tipper HMI being connected to the controller via the field bus; comprising at least one human-machine interface (HMI) connected to the controller; wherein the at least one HMI is connected to a external communications network; wherein at least one of the plurality of devices is connected to the field bus via an interface; wherein at least one of the devices transmits data including diagnostic data to the controller over the field bus; wherein the tipper controller and rod maker controller are interconnected; further comprising a motion controller by the first controller for synchronizing a plurality of motors on one or both of the rod maker and the tipper (col. 7 lines 13-68, Fig. 1 reference numbers 21, 22, 23, 24, 25, 27, 28).

Referring to claims 5, 6, 8-10, 29, 34, and 43-45, Arthur et al. additionally discloses that the plurality of motors includes a cut-off motor for driving a device for

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cutting individual tobacco rods, a suction chamber motor for driving a suction belt, a garniture belt drive motor, and a hopper motor for controlling the rate at which tobacco is drawn from a hopper; wherein the rotational speed of the suction chamber motor, the garniture belt drive motor and the hopper motor are synchronized to the rotational speed of the cut-off motor; wherein the plurality of motors further includes an ecreteur motor for driving a dense end cam and a pair of ecreteur discs, and a printer motor for driving a printer to print onto the cigarette wrapping paper; wherein the ecreteur motor and the printer motor are speed and position synchronized to the cut-off motor; wherein the plurality of motors further includes a tipper motor for driving a tipper drum train, wherein the tipper motor is synchronized to the position of the cut-off motor; wherein the synchronized motors include motors synchronized by speed and motors synchronized by position (col. 3 line 60 – col. 4 line 20).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 32, 33, 37-42, 49, and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arthur et al. as applied to claims 11, 20, 35, and above, and further in view of Official Notice. Referring to claims 37-42, Arthur et al. discloses sending a stop signal to the field devices. Arthur also discloses slowing down the motor of the filter attachment machine so that the operation of the machine can be checked, presumably

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for faults (col. 6 line 57 – col. 7 line 12). Arthur et al. does not specifically disclose that stop signal indicates a fault condition, such as a protective guard on the rod maker or tipper not being in place, and communicating the cause of the stop signal along with component identification information. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Arthur et al. to include the aforementioned features since Examiner takes Official Notice that it is well known to communicate fault information of this kind in a manufacturing operation so that the fault can be identified and repaired quickly and waste can be avoided as taught by Arthur (col. 6 line 68 and col. 7 lines 13-19).

Referring to claims 32, 33, 49, and 50, Arthur et al. does not specifically disclose that the HMI is configured to display to the operator one of a hierarchical set of display screens; wherein at least one of the set of screens includes rows areas representing buttons for controlling rod maker or tipper functions. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Arthur et al. to include these features since Examiner takes Official Notice that it is well known in the art to use these types of display screen configurations to control machine functions in a manufacturing process.

9. Claim 46 is rejected under 35 U.S.C. 103(a) as being unpatentable over Arthur et al. as applied to claim 35 above, and further in view of Lorenzen U.S. Patent No. 3,720,815. Arthur et al. does not disclose that the machine controller looks for a signal on the field bus indicating that a wrapping paper bobbin or a tipping paper bobbin is nearly exhausted and, if the signal is detected, initiates a routine to splice a fresh paper

bobbin onto the present paper bobbin. However, Lorenzen discloses a machine controller looks that looks for a signal indicating that a wrapping paper bobbin or a tipping paper bobbin is nearly exhausted and, if the signal is detected, initiates a routine to splice a fresh paper bobbin onto the present paper bobbin (col. 10 line 55 – col. 11 line 14). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Arthur et al. with Lorenzen since Lorenzen teaches that a detection system such a this can prevent excessive losses in output or damage to machine parts (col. 2 lines 10-36).

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Beasley et al. U.S. Patent No. 4,827,423 discloses a computer integrated manufacturing machine for producing cigarettes.

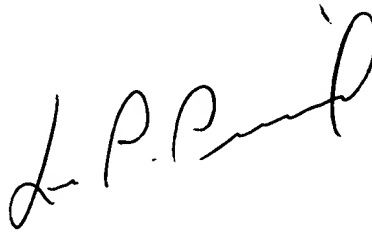
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan A. Jarrett whose telephone number is (703) 308-4739. The examiner can normally be reached on 9:30-6:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on (703) 308-0538. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

raj
February 5, 2003

A handwritten signature in black ink, appearing to read "L. P. Picard", written in a cursive style.

LEO PICARD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100